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Amendments to the Claims

The following listing of claims will replace all prior versions and listings of claims in the application.

1-94. (Canceled)

95. (Currently amended) A transgenic maize seed comprising a synthetic DNA sequence that encodes a *Bacillus thuringiensis* (Bt) insecticidal protein stably incorporated into the genome of said seed, said synthetic DNA sequence comprising a sufficient number of the following codons: GCC, CGC, AAC, GAC, TGC, CAG, GAG, GGC, CAC, ATC, CTG, AAG, ATG, TTC, CCC, AGC, ACC, TGG, TAC, and GTG, such that said synthetic DNA sequence has at least about 60% G+C content ~~a chimeric gene comprising a heterologous promoter sequence operatively linked to a synthetic DNA coding sequence that encodes a *Bacillus thuringiensis* (Bt) insecticidal protein selected for optimized expression in a plant, wherein said synthetic DNA coding sequence is produced by a method comprising:~~

(a) ~~obtaining the amino acid sequence of said Bt insecticidal protein;~~
(b) ~~reverse translating said amino acid sequence into a synthetic DNA coding sequence comprising a sufficient number of the single codons that most frequently encode each amino acid in maize, wherein said synthetic DNA coding sequence has at least about 60% G+C content, and wherein the single codons that most frequently encode each amino acid in maize are determined by:~~

- ~~(i) pooling a plurality of gene sequences from maize;~~
- ~~(ii) calculating a codon usage profile from said pooled maize gene sequences; and~~
- ~~(iii) determining which single codon most frequently encodes each amino acid in maize; and~~
- ~~(e) synthesizing said DNA coding sequence.~~

96. (Original) A transgenic maize seed according to claim 95, wherein said *Bacillus thuringiensis* insecticidal protein is CryIA(b).

97. (Original) A transgenic maize seed according to claim 95, wherein said *Bacillus thuringiensis* insecticidal protein is CryIB.

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98. (Currently amended) A fertile transgenic maize plant grown from the transgenic maize seed of claim 95.

99. (Original) A method of controlling insect pests, comprising contacting the insect pests with the transgenic plant according to claim 98.

100. (Original) The method of claim 99, wherein the insect pests are lepidopteran insect pests.

101. (Original) The method of claim 100, wherein the insect pests are European corn borers.

102. (Currently amended) A method of producing an insect-resistant maize plant, comprising growing the transgenic maize seed of claim 95, wherein said synthetic DNA ~~eeding~~ sequence is expressed in said plant in an effective amount to control insect pests.

103. (Original) The method of claim 102, wherein the insect pests are lepidopteran insect pests.

104. (Original) The method of claim 103, wherein the insect pests are European corn borers.

105-130. (Canceled)

131. (New) A transgenic maize seed according to claim 95, wherein said synthetic DNA sequence is expressed in leaf tissue in a plant grown from the seed at a level that causes mortality to European corn borer.

132. (New) A transgenic maize plant according to claim 98, having leaf tissue that expresses the insecticidal protein at a level that causes mortality to European corn borer.